AUGUST 2001 FIRE COMPLEX
BURNED AREA EMERGENCY STABILIZATION REHABILITATION PLAN

PART F - SPECIFICATIONS

SPECIFICATION TITLE:	**Monitoring Severe Watershed Conditions**	**JURISDICTIONS:**	**BLM, ELKO FO**
PART E LINE ITEM:	**#15 W-4 Monitoring Water Quality, Cross Sections and Soil Erosion.**	**FISCAL YEAR (list each year):**	**2002 - 2004**

I. WORK TO BE DONE **Not Approved**

A. General Description: Test water quality parameters and measure cross sections and streamflow at existing water quality sites on select historic Lahontan Cutthroat Trout streams. Water quality parameters to be monitored would be pH, temperature, total suspended solids, turbidity, alkalinity, nitrate, nitrite, total phosphorous and fecal coliform. Select other sites to set up cross sections and monitor soil erosion that are representative of the full range of conditions found in the watersheds.

B. Location (Suitable) Sites: Water quality and soil erosion monitoring sites would occur in the following watersheds:

Stag Fire- Conners Creek: 1) T41N, R58E, Sec. 34 SW, SW 2) T40N, R58E, Sec. 1 NE
Coyote Fire- Beaver Creek: 1) T37N, R51E, Sec. 24, SE, SE 2) T37N, R51E, Sec. 11, SW, SW
Buffalo Fire- Frazier Creek: 1) T39N, R46E, Sec. 1 NW, NW; 2) T39N, R47E, Sec 6 SE SW
Bailey Fire- Trout Creek: 1) T30N, R52E, Sec. 26 SW, SW

Soil Erosion would be monitored within the Mile Marker 367 fire. Cross sections will be taken to monitor the drainage in case of any mud debris flows.

C. Design/Construction Specification (number and describe each task):

1. Use existing water quality sites to monitor water quality during spring runoff, normal and low flows.

2. Select sites for soil loss monitoring that are representative of the full range of conditions found in the watershed.

3. Establish cross section locations to monitor any changes to stream channels or drainages. Measure flows after spring runoff. Calculate flow and sediment load.

4. After spring runoff and major thunderstorm events (>1" intensity) review sites to assess the need for treatment to prevent unacceptable soil loss.

5. Record upward (i.e., establishment of ground cover) or downward (i.e., establishment of rills, bank erosion) trends.

6. Use existing recording rain gauges around each fire area so that precipitation amounts can be established after floods

and soil loss events.

D. Purpose of Treatment Specification: To determine if water quality would be altered significantly by the fire to be detrimental to LCT. This data would be used by local managers to assess watershed condition for use in decisions related to fire. Water and precipitation monitoring would be used to evaluate changes in hydrologic function as a result of fires. Cross section measurements would be used to determine changes to the channel.

II. LABOR, MATERIALS AND OTHER COST

PERSONAL SERVICES (Grade @ Cost/Hour x # Hours X Fiscal Years = Cost/Item): **(Do not include contract personnel costs here - see contract services below).**	**COST/ITEM**
GS -12 @ $25.00/HourX 40 Hours X 3 Years	$ 3,000
GS- 07 @ $14/Hour X 80 Hours X 3 Years	$ 3,360
GS- 05 @ $12/Hour X 120 Hours X 3 Years	$ 4,320
TOTAL PERSONNEL SERVICE COST	$ 10,680
EQUIPMENT PURCHASE, LEASE OR RENTAL (Item @ Cost/Hour or Day X # Hours or Days X # Fiscal Years = Cost/Item): (Note: Purchase requires written justification that demonstrates cost benefits over lease or rental).	**COST/ITEM**
TOTAL EQUIPMENT PURCHASE, LEASE, OR RENTAL COST	
MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X Fiscal Years = Cost/Item):	**COST/ITEM**
Permanent Cross Section markers @ $2.50/Each X 16 X 1 Year	$40

Photographic film @ 1 roll/day X 3 days X $3.00/roll X 3 years	$27
Photographic film development: 3 rolls X $4.00/development X 3 years	$36
Tapes, lab equipment, topo maps, miscellaneous supplies @ $100.00 X 1 purchase X 1 year	$100
Water Quality Laboratory Test @ $125/Each X 15 X 3 Years	$5625
TOTAL MATERIALS AND SUPPLY COST	$5828
TRAVEL COST (Personnel @ Rate X Round Tips X Fiscal Years = Cost/Item):	**COST/ITEM**
$ 33/ day X 60 days +$ 0.17/ mile X 200 miles/day X 35 days	$3,170
TOTAL TRAVEL COST	**$3,170**
CONTRACT COST (Labor, Equipment, and Travel @ Cost/Hour X # Hours X Fiscal Years = Cost Item):	**COST/ITEM**
TOTAL CONTRACT COST	

SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNIT COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	**Sites**	**819.92**	**8**	**6,559**	**EFR**	**p**
FY 2	**Sites**	**819.92**	**8**	**6,559**	**EFR**	**p**
FY 3	**Sites**	**819.92**	**8**	**6,559**	**EFR**	**p**
TOTAL			**24**	**$ 19,678**		

FUNDING SOURCES:
F = Fire Suppression Account
EFR = Emergency Fire Rehabilitation
OP/O = Agency Operating/Other
EWP = Emergency Watershed Protection

METHODS FOR COMPLETION:
P = Agency Personnel Services
C = Contract (long-term)
EFC = Emergency Fire Contract
FC = Crew Labor Assigned to Fire

SOURCE OF COST ESTIMATE

1. Estimate obtained from 2 - 3 independent contractual sources	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies.	
4. Estimate based upon government wage rates and materials cost.	**P, T**
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services **M** = Materials/Supplies **T** = Travel **C** = Contract **F** = Suppression

III. RELEVANT DETAILS, MAPS, AND DOCUMENTATION INCLUDED IN REPORT

List relevant documentation and cross-references within BAER Report:
See Forest and Woodland Assessment and stand data sheets

IV. TOTAL COST BY JURISDICTION

JURISDICTION	UNITS TREATED	COST
BLM	Monitoring Sites	$ 19,678
TOTAL COST		$ 19,678